UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte STEVEN BATHICHE, MARK K. SVANCAREK,
MATTHEW J. STIPES, ADITHA M. ADAMS, THOMAS W. BROOKS,
MELISSA S. JACOBSON and WOLFGANG A. MACK

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Appeal No. 2005-1902
Application No. 09/251,519

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ON BRIEF

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U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES
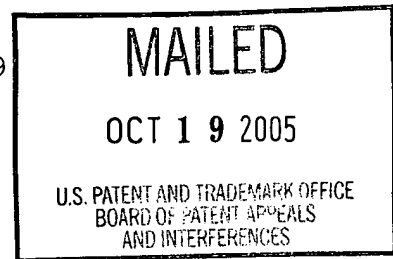
Before BARRETT, OWENS and RUGGIERO, *Administrative Patent Judges.*

OWENS, *Administrative Patent Judge.*

DECISION ON APPEAL

This appeal is from a rejection of claims 1-20, 22 and 23,
which are all of the pending claims.

THE INVENTION

The appellants' claimed invention is directed toward
computer input using a hand-held device having an orientation
sensor thereon. Claims 1, 13 and 23 are illustrative:

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1. A method of preparing a data packet indicative of operator manipulation of a hand held computer input device, the method comprising:

receiving information indicative of a physical orientation of the computer input device;

receiving information indicative of a configuration of a multiple-switch device located on the computer input device and having at least two different degrees of motional freedom wherein movement of the multiple-switch device in the different degrees of motional freedom causes actuation of different switches in the multiple-switch device; and

placing data in an orientation field and a multiple-switch field in the data packet.

13. A method of preparing a data packet indicative of operator manipulation of a hand held computer input device, the method comprising:

receiving orientation information indicative of a physical orientation of the computer input device;

receiving rotation information indicative of rotation of a rotatable member on the computer input device; and

placing data in an orientation field and a rotation field in the data packet based on the orientation information and the rotation information.

23. A method of controlling a visual display on a computer display device based on an input from a computer input device, the method comprising:

receiving orientation information indicative of a physical orientation of the computer input device;

receiving switch information indicative of a configuration of a multiple-switch device located on the computer input device and having at least two different degrees of motional freedom wherein movement of the multiple-switch device in the different degrees of motional freedom causes actuation of different

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switches in the multiple-switch device;

receiving mode information indicative of a selected mode of operation; and

controlling the display device such that an object being displayed on the visual display device assumes a visual orientation corresponding to one of, the physical orientation of the computer input device as indicated by the orientation information and the configuration of the multiple-switch device as indicated by the switch information, based on the selected mode.

THE REFERENCES

Ogata et al. (Ogata)	6,001,014	Dec. 14, 1999	
		(filed Sep. 30, 1997)	
Barnes et al. (Barnes)	6,069,594	May 30, 2000	
	(effective filing date Jul. 29, 1991)		

THE REJECTION

Claims 1-20, 22 and 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ogata in view of Barnes.

OPINION

The rejection is affirmed as to claims 1, 2, 7-10, 16, 20 and 23, and reversed as to claims 3-6, 11-15, 17-19 and 22.

The appellants indicate that the claims stand or fall in the following groups: 1) claims 1, 10, 16 and 20; 2) claims 2, 7-9 and 23; 3) claims 3-6 and 22; 4) claims 11 and 12; and

5) claims 13-15 and 17-19 (brief, page 4).[1] Thus, with respect

to the groups in which the rejection of a claim is affirmed, we

limit our discussion to one claim in each group, i.e., claims 1

and 2. *See In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127,

1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c)(7)(1997).

Claim 1

Ogata discloses, in the third embodiment, a method for

preparing a data packet indicative of operator manipulation of a

hand held computer input device (game machine control module 120)

(col. 26, lines 35-51).

Ogata's game machine control module has a minicomputer that

determines the attitude of the game machine control module based

upon data obtained from an angular velocity sensor (155) on the

game machine control module (col. 24, lines 44-57; col. 25,

lines 62-66; col. 27, line 63 - col. 28, line 4; col. 28,

lines 38-44; figure 38). Hence, Ogata receives information

indicative of a physical orientation of the computer input

device.

Ogata's game machine control module has control sections (7-

10) consisting of a plurality of switches that are actuated using

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[1] Citations herein to the brief are to the supplemental
brief filed January 5, 2004.

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buttons in the control sections (col. 1, lines 26-29; col. 26, lines 12-14; figure 38). Thus, Ogata discloses receiving information indicative of a configuration of a multiple-switch device located on the computer input device and having at least two different degrees of motional freedom wherein movement of the multiple-switch device in the different degrees of motional freedom causes actuation of different switches in the multiple-switch device.

Ogata's disclosures that 1) the game machine control module can send control data from its control buttons to a game machine (27) (col. 26, lines 35-41), and 2) the game machine control module's microcomputer can transmit velocity detection signals to the game machine such that the attitude of the game machine control module is determined using a microcomputer on the game machine (col. 34, lines 20-36), indicate that both game machine control module orientation data and multiple-switch field data can be sent from the game machine control module to the game machine. Ogata's disclosure that the data transmitted between the game machine control module and the game machine is transmitted after packetizing into "a packet" (col. 26, lines 48-51; figure 48) indicates that the data in the orientation field and multiple-switch field is placed in the same data packet.

The appellants argue, in reliance upon Ogata's column 34, lines 37-56, that Ogata does not disclose placing both physical orientation data and multi-switch data in the same packet but, at best, discloses sending positional information in place of button information (brief, pages 6 and 8; reply brief, page 2). As indicated by Ogata's column 34, lines 37-38 and 43-44, the embodiment relied upon by the appellants is an alternative to the above-discussed embodiment.

Hence, we are not convinced of reversible error in the examiner's rejection of claim 1. Accordingly, we affirm the rejection of that claim and claims 10, 16 and 20 that stand or fall therewith.

Claim 2

Actuation of one of Ogata's plurality of switches in control sections 7-10 provides a selected mode of operation (e.g., forward, reverse, etc.). Hence, Ogata receives information indicative of a selected mode of a plurality of selectable modes of operation. When the mode of operation is selected, the placement of the data in the multi-switch field and the orientation field necessarily is based on the selected mode.

The appellants argue that Barnes does not disclose or suggest packetizing based on mode (brief, page 9). Packetizing

based on selection of mode of operation is disclosed by Ogata as discussed above.

We therefore affirm the rejection of claim 2 and claims 7-9 and 23 that stand or fall therewith.

Claims 3-6

Claim 3, which depends from claim 2, requires placing orientation data indicative of the physical orientation of the computer input device in the orientation field when the selected mode is a first selected mode, and placing predetermined orientation data, which corresponds to the configuration of the multiple-switch device, in the orientation field when the selected mode is a second selected mode.

The examiner argues that the limitation in claim 3 is disclosed by Barnes at column 8, lines 37-53 (answer, page 5). That portion of Barnes discloses operating a mouse in 2-D, 3-D and 6-D modes, but does not disclose the limitation in the appellants' claim 3.

The examiner argues that "[i]t is obvious to one of ordinary skill in the art that the placement of data can be determined in any method" (answer, page 10). The examiner, however, does not explain how the applied prior art would have fairly suggested, to

one of ordinary skill in the art, the data placement method

required by the appellants' claim 3.

For the above reasons we reverse the rejection of claim 3

and claims 4-6 that depend directly or indirectly therefrom.

Claim 22

Claim 22 requires a mode selector that can be actuated by an

operator.

The examiner relies upon the argument presented with respect

to claim 3 (answer, page 8). That argument is not persuasive for

the reasons given above regarding the rejection of that claim.

Consequently, we reverse the rejection of claim 22.

Claims 11 and 12

Claim 11 requires replacing the orientation information in

the orientation field with a predetermined orientation value,

based on the switch information, when the selected mode is a

second selected mode.

The examiner argues that Barnes discloses two different

operational modes and pitch, yaw and roll rotations, and that

Ogata discloses a gyroscope (answer, page 7), but the examiner

does not explain how the references would have fairly suggested,

to one of ordinary skill in the art, the limitation in claim 11.

Consequently, we reverse the rejection of that claim and its dependent claim 12.

Claims 13-15 and 17-19

Claim 13 requires receiving rotation information indicative of rotation of a rotatable member on the computer input device. Claim 17 requires a rotation field containing rotation information indicative of rotation of a rotatable member on the computer input device. The appellants' exemplified rotatable member is a rotatable wheel (24; figure 1).

The examiner argues that Barnes discloses rotation of the input device (answer, page 8 and 11). Claims 13 and 17, however, require rotation of a rotatable member on the computer input device, not rotation of the computer input device. While it may have been obvious to one of ordinary skill in the art to use a rotatable member such as a wheel instead of a button in Ogata's game control module, the examiner has not provided a reference which shows a rotatable member. Hence, we reverse the rejection of claim 13 and claims 14 and 15 that depend directly or indirectly therefrom, and claim 17 and claims 18 and 19 that depend directly or indirectly therefrom.
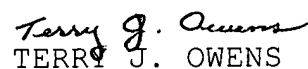
DECISION

The rejection of claims 1-20, 22 and 23 under 35 U.S.C.

§ 103 over Ogata in view of Barnes is affirmed as to claims 1, 2,

7-10, 16, 20 and 23, and reversed as to claims 3-6, 11-15, 17-19

and 22.

No time period for taking any subsequent action in

connection with this appeal may be extended under 37 CFR

§ 1.136(a)(1)(iv).

AFFIRMED-IN-PART

LEE E. BARRETT   )
Administrative Patent Judge   )
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) BOARD OF PATENT
TERRY J. OWENS   )   APPEALS AND
Administrative Patent Judge   ) INTERFERENCES
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